

# ARTHROSCOPY



## ■ ■ ■ Description

An arthroscope is an instrument that allows your physician to look directly into the joint that is bothering you. It is an instrument about the size of a pencil (smaller ones exist to look in smaller joints) that is attached to a video camera. Your physician can put the arthroscope inside your joint while observing the structures in your joint on a television monitor.

## ■ ■ ■ Indications (Who Needs Surgery, When, Why, and Goals)

Arthroscopy was initially used to help diagnose problems of the knee. It showed physicians things never seen before and has proven to be an excellent diagnostic tool. Technology has progressed to allow physicians to look in the knee, shoulder, ankle, elbow, hip, wrist, hand, and even the big toe. Examination of these joints is being performed more and more often. The arthroscope is also being used in some situations (uncommonly) to look within tendon sheaths.

Surgical arthroscopy was the next logical step after diagnostic arthroscopy proved so valuable in identifying conditions that then had to be treated with open surgery that caused a great deal of pain and discomfort. Technology has reached the point where physicians are doing many of the same procedures arthroscopically with small incisions that were done open with larger incisions just a few years ago. Still, removal of tissue may disturb the other tissues, causing bleeding, swelling, pain, and the need for longer healing time and rehabilitation than after diagnostic arthroscopy alone.

Specially designed surgical instruments are used to remove, repair, or reconstruct (replace) damaged tissue. Techniques include trimming tissue; removing loose bodies (fragments of cartilage or bone) within joints; suctioning debris; biopsy of tissue; smoothing rough surfaces; removing inflamed tissue; shrinking tissue; and sewing (suturing), tacking, and stapling cartilage and ligaments. How much can be done within a given joint is dependent on the still-evolving technology and instrumentation, the surgeon's skill, the size and shape of the joint, and our understanding of the body and joints.

The main benefits of arthroscopy are that it allows the surgeon to reach a more accurate diagnosis to prescribe appropriate treatment and perform surgical procedures. Arthroscopy is usually performed through small incisions that heal quickly and cause less pain and trauma to the tissues, allowing for better and quicker healing of many problems. Furthermore, most arthroscopic surgeries are done on an outpatient basis (you go home the same day) because less trauma is caused by performing the procedure through the smaller incisions, although some surgeries may require hospital admission. Regardless of whether a surgery is performed arthroscopically, full recovery requires a period of healing and rehabilitation.

Diagnostic arthroscopy is a valuable tool as well, because radiographs do not show soft tissue well. The need for diagnostic arthroscopy has lessened with the development of magnetic resonance imaging (MRI), but occasionally arthroscopy is still needed to make a diagnosis. The arthroscope allows direct visualization of the soft tissues, cartilage, and bone in living color and motion.

## ■ ■ ■ Technique (What Is Done)

Repair and reconstruction techniques often require additional or larger incisions than diagnostic arthroscopy portals ( $\frac{1}{4}$  inch incisions). The procedures generally are more extensive than excision procedures. Furthermore, the patient may need to stay in the hospital overnight after arthroscopic repair or reconstruction. Because more tissue is disrupted, more discomfort may occur and the temporary use of braces, casts, or crutches, as well as rehabilitation, may be needed.

Before undergoing arthroscopy, a complete evaluation is needed to have as accurate a diagnosis as possible. This may include a medical history, physical examination, and special diagnostic tests and imaging studies. On the basis of these, arthroscopy may be indicated to confirm the diagnosis. In many cases your surgeon will be able to correct the problem at the same time. Sometimes a diagnostic arthroscopy is

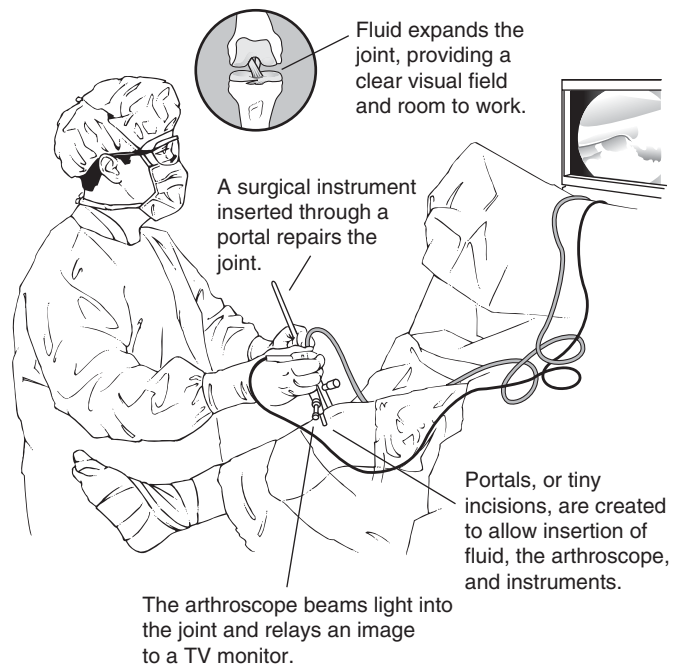


Figure 1

performed and other surgery (open or arthroscopic) is scheduled for later.

Diagnostic and surgical arthroscopy may be performed under local anesthesia (just the joint is numbed), regional anesthesia (the limb being operated on is numbed), spinal or epidural anesthesia (only the lower extremities are numbed), or general anesthesia (you are completely asleep), depending on the needs of the patient and surgeon and the problem being treated.

You may be given pictures or a video of the arthroscopic operation if you ask your surgeon ahead of time.

Do not eat or drink anything for at least 8 hours before surgery. Food and drinks (including coffee) make general anesthesia more hazardous.

#### ■ ■ ■ **Notify Our Office If**

- Any of the following occur after arthroscopy:
  - You experience pain, numbness, or coldness in the extremity operated on
  - Blue, gray, or dusky color appears in the fingers or toenails
  - You have increased pain, swelling, redness, drainage, or bleeding in the surgical area despite rest, ice, elevation, and pain medications
  - You have signs of infection, including a fever 101°F or higher

Notes:

(Up to 4400 characters only)

Notes and suggestions